



CEWASTE

Voluntary certification
scheme for waste treatment

DESIGN OF VERIFICATION PROCEDURES

DELIVERABLE 3.2



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ACRONYMS

CRM	Critical Raw Material
EEE	Electrical and Electronic Equipment
ELV	End-of-life Vehicle
WEEE	Waste Electrical and Electronic Equipment
WP	Work package

SUMMARY

The H2020-project CEWASTE aspires developing and testing a certification scheme with requirements enabling the recycling of Critical Raw Materials (CRMs) and valuable materials. In the third work package, the consortium has developed and defined an assurance system and related verification mechanisms that effectively ensure that take back systems, collection, transport and treatment facilities actually and reliably comply with current certification systems and the normative sustainability and traceability requirements defined in Work Package 2 in their daily operations. With reference to existing certification schemes, auditing standards and good practice guides for assurance and certification systems, Work Package 3 has developed:

- The assurance system including the verification mechanisms,
- Certification procedures, and
- Implementation guidelines, especially for verification mechanisms and auditing procedures

Task 3.2 of this work package was focused on the development of the verification procedures needed to support the operation of the assurance scheme. The processes, in terms of the rules for how they are to be performed, are already addressed in the deliverable of Task 3.1 (D3.1). The following deliverable only contains the templates and tools that have been designed for the various verification processes.

The results of this second work package task have also affected the design of the assurance and verification manuals prepared in Task 3.3. The system developed in Work Package 3 has further provided a basis for the validation of the scheme to that was carried out in pilot audits in Work Package 4.

1 INTRODUCTION

1.1 THE CEWASTE PROJECT

The CEWASTE project contributes to an improved recycling of valuable and critical raw materials (CRMs)¹ from key types of waste through the auditing and certification of traceable and sustainable treatment processes in the entire supply chain of secondary raw materials. CEWASTE addresses the specific challenge to secure the sustainable access to CRMs for the EU economy as well as objectives set by the EU action plan for the Circular Economy, the issue of illegal trade of wastes within the EU and to non-EU countries, and the need to support the development of environmentally and socially sound recycling systems globally.

Specifically, the project has developed, validated and launched a voluntary certification scheme for collection, transport and treatment facilities of key types of waste containing significant amounts of valuable and critical raw materials. To ensure a comprehensive approach and a robust result, the project was developed along the following six specific objectives:

- **Objective 1:** Understand existing recovery practice, standards and verification schemes related to valuable and critical raw materials and how these can be leveraged for CEWASTE.
- **Objective 2:** Leverage existing normative requirements to develop technical, sustainability and traceability requirements for the voluntary certification scheme.
- **Objective 3:** Develop an assurance system and related verification procedures that effectively ensure that facilities and raw material streams are compliant with sustainability and traceability requirements.
- **Objective 4:** Validate the new voluntary scheme through pilots with selected and committed stakeholders of the value chain.
- **Objective 5:** Ensure long term sustainability of the scheme, reflecting on the needs from existing governance mechanisms, and resulting in a roadmap addressing the amendments of new requirements or mechanisms needed.

¹ For the list of CRMs see https://ec.europa.eu/growth/sectors/raw-materials/specific-interest/critical_en - the current version was published in 2017

- **Objective 6:** Ensure a transparent stakeholder process that allows for broad acceptance and dissemination of the essentials of the scheme.

CEWASTE has delivered tangible results in the form of analysis of reports, a set of rules (normative requirements), related administrative and procedural mechanisms to ensure compliance with the rules, practical guidelines, and an implementation plan as outlined in detail in the work plan of the project's Grant Agreement. In addition, the project produce a series of recommendations for long-term sustainability of the scheme as part of these results.

CEWASTE did not develop the new voluntary scheme from scratch nor formally amend existing standards. In view of the two years implementation condition set by the call, the project has focused on developing the scheme based on the current developments in recovery technologies and on the existing normative landscape in the field of waste treatment and responsible sourcing of raw materials, while presenting a clear roadmap for necessary amendments of existing mechanisms and a large-scale roll-out of the scheme.

The CEWASTE consortium² developed the scheme until 15 April 2020.

1.2 PURPOSE OF THIS DELIVERABLE AND OVERVIEW OF WORK PACKAGE 3

Deliverable 3.1 describes an assurance system developed in this task and the framework that it sets for following tasks and for the conformity assessment of the CEWASTE standard in general.

The deliverable specifies the general structure of the scheme and provides the rules as to how various processes are to be carried out. It also specifies rules as to the eligibility of individuals and/or organisations acting under certain roles in the scheme. For example individuals acting on behalf of the scheme as auditors, organisations assuming the ownership or part of the management board, etc.). How such rules are to be updated from time to time and maintained is also addressed.

² The owner of the scheme shall be determined at a later stage.

Deliverable 3.2 provides templates and documents to be applied as part of the verification procedures described in the scheme rules. These include templates for performing certain procedures, such as an audit plan template to be used by auditors when planning the assessment of the facility of an operator that has applied for certification or an audit template to be used by the auditors when verifying the compliance of the facility of an operator with the normative requirements of the scheme. A check-list tool is also included (together with the verification manual developed in Task 3.3) and provides the first level of support for auditors as to the basis for concluding on the compliance of an operators' facility with a specific requirement.

Deliverable 3.3 was developed subsequently to deliverables 3.1 and 3.2 and includes two manuals to further support the scheme. The assurance manual provides clear guidance on what protocols, procedures, documents, etc. would be considered as acceptable for the verification procedures established in the certification scheme. It aims to assist operators in complying with the CEWASTE standard and preparing for the certification (audit). The verification manual (merged with the checklist tool) assists the auditors (second-level) by providing more detail for the verification procedures and thus also helps to ensure a more harmonised application of the CEWASTE scheme and of the results of the various activities.

2 THE DOCUMENTS INCLUDED IN THIS DELIVERABLE

As explained in the introduction, this deliverable is a compilation of templates and tools that have been designed to support the various procedures developed as part of the assurance system in Task 3.1.

The documents herein are relevant at different phases of the certification process and address the various aspects of relevance at that stage.

In general, certification includes a few stages as illustrated in Figure 1 below. See also Figure 1: "*CEWASTE certification process flowchart*" of deliverable D3.1 in this respect.

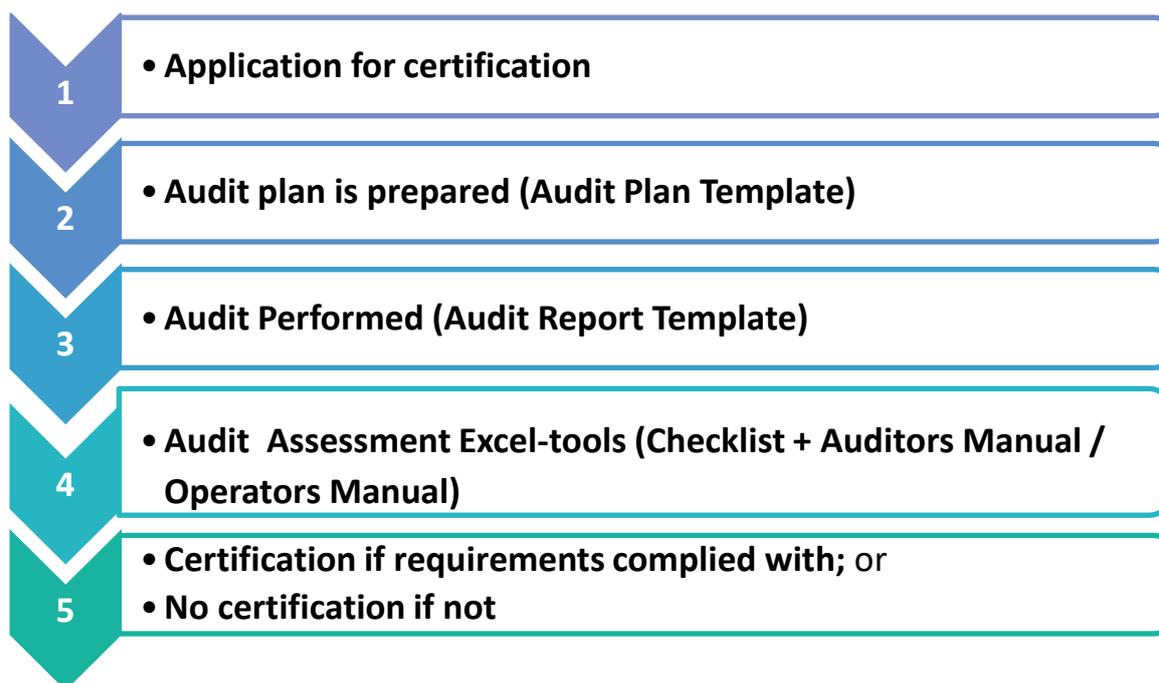


Figure 1. Stages of Certification

Three templates or tools have been developed to support the verification process as addressed above. Two of these appear in the annexes to this document as specified below and the third is designed as an Excel tool available for download on the CEWASTE website under <https://cewaste.eu/wp-content/uploads/2021/04/Verification-tool-and-manual-for-auditors.xls> (see further detail below and visit the Library³ section of the CEWASTE project for potential updates).

The Audit Plan Template appears in Annex 1. It is addressed under the “*Audit Plan*” Title of Section 5.9.3 “*Assessment of Conformity*” of Deliverable 3.1 under the CEWASTE rules. It is a template to be used by the lead auditor for planning and coordinating the audit, thus also ensuring that the relevant individuals of the audit team and of the operator shall be available for the meetings planned and are aware of what is to be audited in terms of what needs to be prepared.

The Audit Report Template appears in Annex 2. It is addressed under the “*Audit Results*” Title of Section 5.9.3 “*Assessment of Conformity*” of Deliverable 3.1 under the CEWASTE rules. The audit

³ <https://cewaste.eu/library/>

report template is to be used by the auditor to document the results of an audit. Aside from the standard identification details of the operator and of the auditing team, it summarises the scope of the audit, i.e., activities to be audited and their scope as well as sites covered by the certification. The type of audit needs to be specified and results of the audit documented in terms of non-conformities requiring action and clearance (minor non-conformity) and non-conformities that additionally require a follow-up audit (major non-conformities). This documentation must specify the CEWASTE requirements (clauses) not complied with, describing the non-conformity, its cause, planned corrective action (and implemented in case of a follow-up audit) and other findings.

The Checklist Assessment Tool is part of an Excel tool available for download on the CEWASTE website under: <https://cewaste.eu/wp-content/uploads/2021/04/Verification-tool-and-manual-for-auditors.xls>. It is addressed in relation to the “*Audit Execution*” and “*Audit Results*” Title of Section 5.9.3 “*Assessment of Conformity*” of Deliverable 3.1 under the CEWASTE rules. The checklist tool has been developed (in combination with the development of the verification manual tool developed in Task 3.3) to support the auditing and includes questions and explanatory text for each of the requirements.

The explanatory texts have been included in this tool as part of Task 3.3 and the development of the verification manual performed therein. To make sure that it can be followed which questions and texts are relevant for which requirement, the numbering of the articles in the checklist is aligned with the numbering of clauses in the requirements document. Where a clause contains multiple requirements, sub items have been added so that the connection to the initial clause is still ensured. Alignment of this tool with the various versions of the requirement document has among others been used to provide WP 2 with feedback as to where requirements need to be more specific to ensure a unified interpretation or to indicate instances of repetition and inconsistencies. The current version has been aligned with V 8.0 of the requirements document prepared in WP 2. In relation to the checklist, it is also noted that the project team has consulted with the writers of the Handbook for Auditing the EN 50625, which has been developed for the SWICO and the SENSerecycling Certification schemes (Böni et al. 2018). The handbook has been used in the consideration of what explanatory information is to be provided for some of the requirements in the checklist.

3 REFERENCES

1. Böni, H., Hug, E., in collaboration with Conte, F., Bondolfi, A. and Sarà, A. (2018), Behandlung von Elektro- und Elektronikaltgeräten Handbuch für die Auditierung nach der SN EN 50625 Serie, Version 2018 / 31. Juli 2018, Aktualisierungen: 31.07.18, prepared by EMPA in collaboration with Carbotech AG and CH-Aire for SENSerecycling & SWICO, see under: https://www.swico.ch/media/filer_public/8f/3a/8f3a9df9-23ed-4c69-abce-69705fe137be/handbuch_snen50625_2018_dt-2.pdf

ANNEXES

ANNEX 1: AUDIT PLAN TEMPLATE - VERSION 1.0

Audit Plan (VERSION: YYYY-MM-DD)

CEWASTE CERTIFICATION SCHEME

Operator name and address	
Applicant / certificate holder	
Address and contact persons	
Date and place	<i>2010-08-15, Helsinki</i>
Assessment team, their area of expertise, contact details	<i>Mrs. Aalto +358 400685232 elisa.aalto@xxx.com Mr. Dupont +33 600685232 jacques.dupont@xxx.com</i>
Other participants and their roles	
Requirements	<i>CEWASTE Collection of Lamps</i>
Use the CEWASTE terminology <u>only</u> .	<i>CEWASTE Waste treatment of batteries</i>
Remarks:	
<i>Indicate here if the audit is in some way different from the ordinary (specific objective, deviating requirements, any other major aspect that may affect the plan)</i>	

Date/place	Time	Auditor(s)	Customer's personnel involved	Process / Activity
2019-08-15 Site A	08:30	all	all	<p><u>Opening Meeting</u></p> <p>Presentation of participants</p> <p>Purpose of the visit and confirmation of the agenda</p> <p>Application and scope of certification</p> <p>Other general matters (specify)</p>
	09:00	Mrs. Aalto	Quality manager	<p><u>Management system requirements</u></p> <p>General management system requirements</p> <p>Specific management system requirements for collection of lamps</p> <p>Specific management system requirements for waste treatment of batteries</p>
	09:00	Mr. Dupont	<p>Technical manager</p> <p>Operative personnel</p>	<p>Technical requirements for collection of lamps</p>
	11:00	Mrs. Aalto	<p>Technical manager</p> <p>Operative personnel</p>	<p>Technical requirements for waste treatment of batteries</p>
	12-13	all		<p>Lunch break</p>
	13:00	Mrs. Aalto		
	13:00	Mr. Dupont		
	16:30			<p><u>Auditor meeting</u></p>
	17:30			<p><u>Closing meeting</u></p> <p>Conclusions of the audit</p> <p>Presentation of possible non-conformities</p>

				<p><i>Follow-up actions</i></p> <p><i>Date of next audit and possible other issues</i></p> <p><i>Other (specify)</i></p>
	18:00			<p><i>End of the audit visit</i></p>
2019-08-20 Site B	09:00	Mr. Dupont	Plant manager	<p><u>Opening Meeting</u></p> <p><i>Presentation of participants</i></p> <p><i>Purpose of the visit and confirmation of the agenda</i></p> <p><i>Application and scope of certification</i></p> <p><i>Other general matters (specify)</i></p>
	09:30	Mr. Dupont	Plant manager	<p><i>Technical requirements for collection of lamps</i></p>
	11:00	Mr. Dupont	Plant manager	<p><u>Closing meeting</u></p> <p><i>Conclusions of the audit</i></p> <p><i>Presentation of possible non-conformities</i></p> <p><i>Follow-up actions</i></p> <p><i>Date of next audit and possible other issues</i></p> <p><i>Other (specify)</i></p>
	12:00			<p><i>End of the audit visit</i></p>

ANNEX 2: AUDIT REPORT TEMPLATE - VERSION 1.0

AUDIT REPORT

CEWASTE certification scheme

Date of the report: Date

OPERATOR

Company:

Business ID:

Address:

Contact person:

Representative(s) of the operator present during the audit: *Note: first name, LAST NAME*

CEWASTE CERTIFICATION BODY AND AUDITOR

Certification Body <i>name of the CEWASTE Certification Body</i>	
Lead Auditor <i>name of the person (first name, LAST NAME, Company name, City, Country)</i>	
Other auditor <i>name of the person (first name, LAST NAME, Company name, City, Country)</i>	

SCOPE

Activities	Accepted CEWASTE scope of the operator	Audit scope
Waste treatment, Lamps	<input type="checkbox"/>	<input type="checkbox"/>
Waste treatment, Batteries	<input type="checkbox"/>	<input type="checkbox"/>
Waste treatment, Temperature exchange equipment	<input type="checkbox"/>	<input type="checkbox"/>
...	<input type="checkbox"/>	<input type="checkbox"/>
Collection and Logistics, Lamps	<input type="checkbox"/>	<input type="checkbox"/>

Sites covered by the CEWASTE certification:

Company	Address	Activities	Covered by this audit
	<i>Street, City, Country</i>	<i>List of activities</i>	<input type="checkbox"/>
	<i>Street, City, Country</i>	<i>List of activities</i>	<input type="checkbox"/>
	<i>Street, City, Country</i>	<i>List of activities</i>	<input type="checkbox"/>

IDENTIFICATION OF THE AUDIT

Date of the audit: Date

Date of the previous audit: Date

<input type="checkbox"/> Initial audit (also scope extension) <i>this is the first audit, for a site that do not have a CEWASTE certification for the scope of this audit. This also applies for the audit of a site for which there is a valid CEWASTE certification and this audit covers areas new to the site in question (scope extension).</i>	<input type="checkbox"/> Surveillance audit <i>this only applies to sites that have a valid CEWASTE certificate.</i>
<input type="checkbox"/> Follow-up audit Reason for the follow-up audit: <i>date of the audit where the non-conformity requiring a follow-up audit was observed and the reference of the non-conformity.</i>	<input type="checkbox"/> Exceptional audit Reason for the unannounced audit: <i>xx.</i>

RESULTS OF THE AUDIT

<input type="checkbox"/> Under preparation <i>this applies to the pre-filled report, before conducting the audit.</i>	<input type="checkbox"/> Audit conducted, follow-up audit required <i>this applies to a situation where non-conformities have been observed and await clearance.</i>
<input type="checkbox"/> Audit conducted, awaiting clearance of non-conformities, no follow-up audit required <i>this applies to a situation where non-conformities have been observed and await clearance.</i>	<input type="checkbox"/> Audit completed, conformity with the applicable CEWASTE requirement <i>this applies to a situation where no non-conformities have been observed or where non-conformities have been cleared.</i>

Non-conformities:

Major Minor

NC 1/x _____

Due date for action:

Reference to standard's clause(s):

Description of the non-conformity:

Root-cause analysis:

Plan for corrective actions:

Implemented corrective actions:

Assessment of the plan for corrective actions or of the implemented corrective actions:

Approved by:

Date:

Insert more items if applicable

Other findings:

Comments, suggestions for improvements and other remarks